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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/509,789 03/30/00 STERZEL

H 48428

EXAMINER

IM52/0717

KEIL & WEINKAUF
1101 CONNECTICUT AVENUE NW
WASHINGTON DC 20036

DOVE, T	
ART UNIT	PAPER NUMBER

1745
DATE MAILED:

8
07/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/509,789

Applicant(s)
Sterzel

Examiner
Tracy Dove

Art Unit
1745



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2 May 2001
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above, claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 & 6
- 18) ☒ Interview Summary (PTO-413) Paper No(s). Attache
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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DETAILED ACTION

This Office Action is in response to the communication filed on 5/2/01. Applicant has elected Group I, claims 11-19 with traverse. Claim 20 is directed toward a non-elected invention. Applicant has elected the species of Group (3) represented by the formulas (III) or (IIIa) with traverse. This Action is non-Final.

Election/Restriction

Applicant's election with traverse of Group I, claims 11-19, in Paper No. 7 is acknowledged. The traversal is on the ground(s) that Akio does not constitute prior art. This is not found persuasive because Akio does constitute prior art. Akio was published on 7/21/98 which is before invention by Applicant (10/1/98). Applicant must file a certified translation of the priority document which supports the claimed subject matter in order to remove Akio as prior art.

The requirement is still deemed proper and is therefore made FINAL.

Specification

The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification, each of the lettered items should appear in upper case, without underlining or bold type, as section headings.

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- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Background of the Invention.
 - 1. Field of the Invention.
 - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (d) Brief Summary of the Invention.
- (e) Brief Description of the Several Views of the Drawing(s).
- (f) Detailed Description of the Invention.
- (g) Claim or Claims (commencing on a separate sheet).
- (h) Abstract of the Disclosure (commencing on a separate sheet).

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 11-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Claims 11-19 are directed toward a method of using, however, the claims do not recite any method steps.

Claims 15 and 16 recite "A composition...as defined in claim". However, claim 11 (from which claims 15 and 16 depend) is directed toward "A method of using". Claims 15 and 16 are inconsistent with claim 11.

Similarly, claims 17 and 18 recite "An Li-ion storage cell...as defined in claim 11". However, claim 11 (from which claims 17 and 18 depend) is directed toward "A method of using".

Claim 11 should recite "using one ester selected from the group comprising formula (I), formula (II), formula (III), formula (IV) and formula (V)". In line 10 "cain" should be "chain" and "liniear" should be "linear".

In claim 11, line 10 add "selected from the group comprising" after "are" and in line 11 before "an" add "and". In line 12 change "with the proviso that" to "wherein". Since all formulas (I)-(V) do not require R3 and R4, lines 12-13 are indefinite.

Claim 11, line 11 recites "can be substituted" which is indefinite because it is unclear if the limitation is part of the claimed invention.

Claim 12 states "where present, R3 and/or R4", which is indefinite because it is unclear if the limitation is part of the claimed invention.

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See rejection of claim 11, which similarly applies to claim 13.

Claim 16 recites the limitations "the compound (A)" and "the conducting salt (B)". There is insufficient antecedent basis for these limitations in the claim.

Note claim 16 depends from claim 3, which was cancelled.

Claim 19 does not further limit claim 15 (depends from 11).

To the extent the claims are understood in view of the rejections above, note the following prior art rejections.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

Claims 11, 12 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Narang et al., US 5,830,600.

Narang teaches formula (III) in col. 4, lines 1-5 labeled in Narang as formula (I). In formula (I) R1, R2 and R3 are independently selected from the group consisting of (a), (b) and

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(c). See col. 4, lines 6-14. The group (a) includes C1-C6 alkyl terminally substituted with 0-3 halogen atoms and containing 0-3 ether linkages. The compound represented by the formula (I) may be used as the solvent in a fire-retardant electrolyte composition for lithium batteries. The electrolyte composition includes a lithium salt dissolved in the solvent (col. 3, lines 63-67). The lithium salt may be LiBF_4 , LiClO_4 or LiAsF_6 . See col. 10, lines 16-25. In col. 8, lines 15-19 has a specific teaching to use $-(\text{OC}_2\text{H}_4\text{OCH}_3)$.

Thus the claims are anticipated.

Claims 11-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Akio et al., JP 10189038.

Akio teaches the formula (III) of claim 11 in the abstract. R1, R2 and R3 may be identical or different from each other and may be a group having the ether linkage expressed by R4-O-R5 . The R4 and R5 stand for a hydrocarbon group having carbons between 1 and 10. The claims are anticipated when R4 is a hydrocarbon having 2 carbons and R5 is a hydrocarbon having 1 carbon (formula (IIIa) of claim 13). The phosphoric ester compound taught by Akio is used as the solvent of an electrolyte of a lithium battery. The electrolyte includes lithium salts such as LiBF_4 , LiClO_4 or LiAsF_6 . See abstract.

Thus the claims are anticipated.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Narang et al., US 5,830,600.

See discussion of Narang above.

Narang does not explicitly teach that R1, R2 and R3 are $-(OC_2H_4OCH_3)$.

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because Narang teaches R1, R2 and R3 are independently selected from the group consisting of (a), (b) and (c). See col. 4, lines 6-14. The group (a) includes C1-C6 alkyl terminally substituted with 0-3 halogen atoms and containing 0-3 ether linkages. Since R1, R2 or R3 may be $-(OC_2H_4OCH_3)$, one of skill would have known that R1, R2 and R3 could be $-(OC_2H_4OCH_3)$.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracy Dove whose telephone number is (703) 308-8821. The Examiner may normally be reached Monday, Wednesday & Thursday from 7:30 AM - 7:00 PM. My

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supervisor is Gabrielle Brouillette, who can be reached at (703) 308-0756. The Art Unit receptionist can be reached at (703) 308-0661 and the official fax number is (703) 305-3599.

July 12, 2001

G. Brouillette
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